

Road Maintenance and Operation Guidelines for Recreation Residences  
 Preliminary Draft – Jonathan.Kempff, Gallatin National Forest Engineer 4/28/2008

Road Component	Standard	Maintenance requirements	Visual Indicators of adequate maintenance
Roadway	Adequate roadway width is provided	Roadway width is maintained between 8' and 12'	<ul style="list-style-type: none"> <li>No widening, relocations, nor off-route use is visible</li> </ul>
	Roadway surface provides for user needs	Roadway is maintained to allow free flowing traffic without unreasonable surface imperfections	<ul style="list-style-type: none"> <li>No road widening is occurring around mud holes or exposed surface rocks damaging adjacent vegetation</li> </ul>
	Road surface is not damaged during spring breakup	Damaging use is suspended during spring thaw, typically between April 1 and June 1	<ul style="list-style-type: none"> <li>No deep rutting has occurred within the roadway</li> </ul>
Surfacing	Spot surfacing required if route demonstrates continual rutting and excessive erosion	Surfacing is maintained for adequate surface drainage	<ul style="list-style-type: none"> <li>Road shows little sign of deep rutting, minor surface rutting during wet weather is acceptable</li> </ul>
Drainage	Adequate drainage is provided for overland flows	Drainage structures are installed and maintained to pass routine flows	<ul style="list-style-type: none"> <li>No flows are over topping any drainage structures or running down the road</li> <li>Inlets, outlets, or relief ditches are clear of debris and are draining freely with no excessive scour</li> </ul>
	Roadway surface erosion is not occurring	Adequate routine surface maintenance is performed	<ul style="list-style-type: none"> <li>Minimal surface erosion is occurring and little scour is present</li> <li>Roadway is visibly stable and not visibly deteriorating</li> </ul>
		Addition of surface drainage dips are installed where excessive erosion is occurring	<ul style="list-style-type: none"> <li>Excess erosion is arrested following drainage dip installation</li> <li>Adequate filtration zones are present and functioning between</li> </ul>

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			drainage outlets and water bodies
Clearing Limits	Adequate roadway vegetation clearing is maintained	Horizontal clearing is maintained 1' beyond road edge	<ul style="list-style-type: none"> <li>• Trees too close are scared by traffic</li> <li>• Brush, limbs, and debris are present within the clearing limits</li> </ul>
		Vertical clearing is maintained 10' above the roadway	<ul style="list-style-type: none"> <li>• Brush, limbs, and debris are present within the clearing limits</li> </ul>
Other Structures	Other approved structures such as signs, cattle guards, gates, etc are in good condition and functioning as intended	Structures are routinely inspected and maintained as needed	<ul style="list-style-type: none"> <li>• Structures are functioning and in good repair</li> </ul>
Road Bridges	All required components are present and maintained in a functioning condition	Routine Inspections are conducted every 2 years by a licensed Civil Engineer	<ul style="list-style-type: none"> <li>• Listing of deficiencies is prepared and approved by ....</li> </ul>
		Any critical deficiencies are corrected within 2 months of the date of inspection	<ul style="list-style-type: none"> <li>• Repair is evident</li> </ul>
		Non-critical deficiencies are corrected within 1 year of the date of inspection	<ul style="list-style-type: none"> <li>• Repair is evident</li> </ul>
	Load ratings are conducted every 5 years if older than 20 years by a licensed Civil Engineer	Bridge load limits are posted on both sides of bridge if less than legal and greater than 5 tons	<ul style="list-style-type: none"> <li>• Bridges are posted for most recent load rating</li> </ul>
		Bridge is physically closed until either repaired or replaced if 5 Ton rating or less	<ul style="list-style-type: none"> <li>• Barricades and signs are in-place and functioning</li> </ul>